

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI TVU014** is Designed for

**FEATURES:**

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- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

|                         |                               |
|-------------------------|-------------------------------|
| <b>I<sub>C</sub></b>    | 2 x 2.6 A                     |
| <b>V<sub>CB0</sub></b>  | 45 V                          |
| <b>V<sub>CEO</sub></b>  | 25 V                          |
| <b>V<sub>EBO</sub></b>  | 4.0 V                         |
| <b>P<sub>DISS</sub></b> | 65 W @ T <sub>C</sub> = 25 °C |
| <b>T<sub>J</sub></b>    | -65 °C to +200 °C             |
| <b>T<sub>STG</sub></b>  | -65 °C to +150 °C             |
| <b>θ<sub>JC</sub></b>   | 2.5 °C/W                      |

**PACKAGE STYLE .250 BAL FLG**

| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   |                        | .060 / 1.52            |
| B   | .055 / 1.40            | .065 / 1.65            |
| C   |                        | .125 / 3.18            |
| D   | .243 / 6.17            | .255 / 6.48            |
| E   | .630 / 16.00           | .670 / 17.01           |
| F   |                        | .092 / 2.34            |
| G   | .555 / 14.10           | .565 / 14.35           |
| H   | .739 / 18.77           | .750 / 19.05           |
| I   | .315 / 8.00            | .327 / 8.31            |
| J   | .002 / 0.05            | .006 / 0.15            |
| K   | .055 / 1.40            | .065 / 1.65            |
| L   | .075 / 1.91            | .095 / 2.41            |
| M   |                        | .190 / 4.83            |
| N   | .245 / 6.22            | .257 / 6.53            |

**ORDER CODE: ASI10647**

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

| SYMBOL   | TEST CONDITIONS   | MINIMUM    | TYPICAL | MAXIMUM | UNITS                   |
|--|---|------------|---------|---------|-------------------------|
| <b>BV<sub>CB0</sub></b>                        | I <sub>C</sub> = 20 mA  | 45         |         |         | <b>V</b>                |
| <b>BV<sub>CEO</sub></b>                        | I <sub>C</sub> = 40 mA  | 25         |         |         | <b>V</b>                |
| <b>BV<sub>EBO</sub></b>                        | I <sub>E</sub> = 5.0 mA   | 3.0        |         |         | <b>V</b>                |
| <b>h<sub>FE</sub></b>                          | V <sub>CE</sub> = 20 V    I <sub>C</sub> = 0.5 A  | 10         |         | ---     | ---                     |
| <b>C<sub>OB</sub></b>                          | V <sub>CB</sub> = 25 V    f = 1.0 MHz   |            |         | 20      | <b>pF</b>               |
| <b>P<sub>G</sub></b><br><b>IMD<sub>1</sub></b> | V <sub>CE</sub> = 25 V    I <sub>C</sub> = 2 x 850 mA    f = 860 MHz<br>P <sub>OUT</sub> = 14 W | 8.5<br>-50 |         |         | <b>dB</b><br><b>dBc</b> |